

TUNABLE NARROW-BAND FILTER INCLUDING  
SIGMA-DELTA MODULATOR

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ABSTRACT

Sigma-delta modulation ( $\Sigma\Delta$ ) techniques provide a range of opportunities in a signal processing system for both increasing performance and datapath optimization along the silicon-area axis in the design space.  $\Sigma\Delta$  technology, together with FPGA based signal processing hardware, can be combined to produce creative, high-performance and area efficient solutions to many signal processing problems.